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The role of early years care providers in supporting continued breastfeeding and breast milk feeding

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This paper discusses challenges faced by mothers who seek to continue breastfeeding and/or breast milk feeding (B/BMF) whilst using daytime childcare, and early years practitioners' attitudes toward their role in the support of these feeding practices. The dataset being reported comes from a small-scale feasibility study that was conducted in the summer of 2015 at a childcare provider site in a highly deprived urban area of Scotland. Focus groups with B/BMF mothers, as well as with early years practitioners were conducted. We report data pertaining to where responsibility lies for facilitating continued B/BMF, and on the perception of practitioners' attitudes, knowledge about, skills and providers' facilities for B/BMF. We recommend that care providers actively engage prospective parents in a discussion about how they can support continued B/BMF. This original data is contextualised and critically discussed within the wider literature with special attention being paid to the concepts of unintended consequences.

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Keywords: breastfeeding, breast milk, childcare, early years

Introduction

Breastfeeding has been found to be beneficial to a range of physical health (Victora et al. 2016; Horta & Victora 2013) and cognitive (Victora et al 2015; Mortensen 2015; Horta & Victora 2013) outcomes for baby and mother (NHS National Services Scotland 2014; World Health Organisation WHO 2013), supports bonding (Britto et al. 2017), and is beneficial to national economies (Victora et al. 2016; Lancet, 2016, 404). The WHO, as well as Scottish Government recommend exclusive breastfeeding until six months, and complementary breastfeeding for two years (WHO 2001, 2009; Scottish Government 2011). However, breastfeeding rates in Scotland and the wider United Kingdom (UK) are some of the lowest in Europe. In 2010, it was reported that only 62% of women in the UK were breastfeeding in the first week post-

partum, and 23% by six weeks (McAndrew et al. 2010). More recent statistical data from Scotland found that 50% of babies were receiving some form of breast milk around 10 days post-partum, and 41% at the 6-8 week review (NHS National Services Scotland 2017). The 2010 Infant Feeding Survey estimates that less than 1% of children born in the UK are exclusively breastfed to the recommended 6 months (McAndrew et al. 2010), and a 2016 meta-analysis of national breastfeeding data finds breastfeeding to 12 months is uncommon outside of low-income and lower-middle income settings, and under 1% in the UK (Victora et al. 2016).

As one of 37 high-income countries included in a recent Series paper on breastfeeding behaviours for *The Lancet*, one of the challenges that the UK faces is short overall duration of breastfeeding (Victora et al. 2016, 286). The continuation of exclusive breastfeeding to six months and complementary breastfeeding thereafter is less common in middle and high income settings than in low and lower middle income settings (*ibid.*). The prevalence of women returning to work ‘is a leading motive for not breastfeeding or early weaning’ (Rollins et al. 2016, 492) and has an impact on the duration of any or continued breastfeeding (Ogbuanu et al. 2011; Kimbro 2006; Jacknowitz, 2008; Rollins et al 2016; Victora 2016). Intending to return to work is negatively correlated with continued breastfeeding (Thulier & Mercer 2009; Ryan & Zhou 2006), and more so when a woman returns to work for financial reasons and within four months of giving birth (Hawkins et al. 2007). Contextual factors like ‘labour laws and maternity leave’ are related influences on breastfeeding (Hansen 2016, 416). Thus, the UN Convention on the Rights of the Child makes special note of the need to support working parents (UNICEF 1989, entry into force 1990). Predictors of continued breastfeeding after returning to work include: expressing milk to enable breast milk feeding of one’s child (Biagoli 2013; Fein, Mandal & Roe 2008), as well as

concomitant structural support in the workplace (e.g. a room for pumping, pumps, milk storage facilities, *ibid.*; Tsai 2013, and paid breaks for pumping, Viness & Kennedy 1997). Lack of ‘interest, information and [social] support’ from the employer can deter and ultimately curtail breastfeeding or breast milk feeding (B/BMF) even where structural supports exist (Kosmala-Anderson & Wallace 2006, 189). Alongside these factors, policies (including labour market, health and early childhood) that support continued B/BMF are also important to support women’s breastfeeding practices following a return to work (Galtry 2003).

Family and community interventions are important to establishing early breastfeeding behaviour (Rollins et al. 2016), but there is dearth of evidence on their effect on continued breastfeeding (*ibid.*, 493). In Rollins et al.’s *Lancet* Series Paper (2016), ‘community’ constituted family, health workers and other counsellors (including peer-to-peer); work provisions were addressed as a separate form of intervention supporting/deterring breastfeeding. Childcare providers arguably bridge these two categories – they are both required because of work considerations, and are an important component of parent’s non-work community. In 2014, approximately 60.3% of Scottish women with children under the age of 1 were in full time or part time work (Scottish Parliament 2014) and, therefore, were likely to require some form of childcare. It stands to reason that the support of breastfeeding by childcare providers is of direct relevance to Scottish mothers of young children, as well as to national breastfeeding targets.

In 2009, 60% of a sample of 5,217 Scottish children aged 0-1 were placed in formal (e.g. registered child-minder or nursery receiving payment), or informal (e.g. relatives or friends without payment) childcare settings for at least part of the week (Bradshaw and Wasoff 2009), and data from 2011 demonstrates that at least 22% of

parents with children aged 10 months or younger in Scotland were paying for formal childcare (Kidner, Marsh & Hudson 2014). Research has found that mothers are more likely to maintain breastfeeding behaviour when using informal childcare than formal childcare settings (only 7.8% continued breastfeeding when using a formal childcare provider, Shim et al 2012). For this reason, formal childcare settings constitute a critical ground in which to promote continued B/BMF: ‘Childcare providers... have a key role to play in supporting parents in their decision to continue to breastfeed their baby once the mother has returned to work’ (NHS Health Scotland 2015, 24).

This paper reports on a initial small-scale feasibility study that was conducted in the summer of 2015 in an urban setting, located in one of the top ten most deprived areas of Scotland (Scottish Government 2016). Its aim was to determine the feasibility of researching the dynamic relationship between mothers’ breastfeeding decisions and their use of childcare provision. Ethical approval was secured by the University of the West of Scotland Ethics Committee, and small samples of mothers and early years practitioners were successfully recruited to focus group discussions. Given that data was collected as a part of this feasibility study, additional objectives that had been set within the study proposal were explored within the dataset. These objectives, reported below, were a) to identify challenges faced by mothers who seek to continue B/BMF whilst using daytime care, and b) to explore early years’ practitioners attitudes toward their role in the support of continued B/BMF.

Background

Policy

A range of international policy with authority in either Scotland or the wider UK exists in relation to maternal and infant nutrition, including the *Protection, Promotion and*

Support of Breastfeeding in Europe: A Blueprint for Action (launched in 2004 and revised in 2008), which received input from Scotland. The recommendations in the blueprint have been used as a basis for the development of Scotland's *Improving Maternal and Infant Nutrition: A Framework for Action* (Scottish Government 2011), which is a 10-year framework and action plan to improve nutrition in preconception, during pregnancy and in children up to the age of 3 years. Key actions are identified and assigned to a variety of organisations across the statutory and voluntary sector in Scotland, with a key vision that '[a]ll women receive the support they need to initiate and continue breastfeeding for as long as they wish' (Scottish Government 2011, non-paginated).

In order to support women's choice to breastfeed, policy extends responsibility to a range of stakeholders. The *Innocenti Declaration* (UNICEF 1990) was adopted by the UK in 1990, and identifies roles and responsibilities of key stakeholders and emphasises that these responsibilities need to be met to achieve an environment that enables mothers, families and other care givers to make informed decisions about optimal infant feeding. For mothers choosing to return to work, the protection of the right to B/BMF is enshrined in Scottish policy. *Breastfeeding etc. (Scotland) Act 2005* extends protection to B/BMF. The *Management of Health and Safety at Work Regulations 1999* and *Employment Rights Act 2002* places a duty upon employers to assess the risk to employees who are pregnant, have given birth in the last six months or who are breastfeeding. Employers have a duty to consider whether working conditions are a risk to a mother's health or the health of her baby, during a period as long as an employee is B/BMF. Where risk is identified, employers must take reasonable steps to reduce the risk, including temporarily changing working hours or conditions. Among other protective measures stipulated in the policy, the following item is included: that a

woman should be granted '[t]ime off (without loss of pay or benefits, and without fear of penalty) to express milk or breastfeed' (Health and Safety Executive 2013, non-paginated), and this measure is not time-limited.

With reference to children under the age of three, the policy document *Pre-Birth to Three: Positive Outcomes for Scotland's Children and Families* (Learning and Teaching Scotland 2010), supports and informs students and staff working with children under 3 years of age. This policy focuses on prevention and early intervention in tackling the significant inequalities in Scottish society and links closely with the priorities set out in *The Early Years Framework* (Scottish Government 2008), all of which aim to build the capacity of individuals, families and communities so that they can secure the best outcomes for themselves. Being aware of a child's eating pattern and taking action at an early stage can help to achieve positive outcomes for children and families, and the benefits of breastfeeding is explicitly referenced in both documents (LTS 2010, 57; Scottish Government 2008, 32).

The implications of national policy and health targets that are supportive and ambitious for the breastfeeding of children in Scotland have implication on childcare provision. NHS Scotland's *Setting the Table* (2015) supports early years childcare providers to meet the National Care Standards (Scottish Government 2005) and highlights the importance of nutrition in the early years and the role that childcare providers have in shaping both current and future eating patterns in young children in Scotland. Here, childcare providers are described as having a key role to play in ensuring that women who are pregnant are supported to return to work and continue B/BMF. This could be through developing workplace policy and providing facilities appropriate for breastfeeding, or expressing breast milk.

Within Scotland, the importance of childcare providers to the continuance of breastfeeding behaviour is acknowledged by several NHS boards. For example, the Breastfeeding Friendly Nursery Programme was rolled-out in NHS Glasgow and Clyde in 2001 (NHS Greater Glasgow 2005), the Health Promoting Nursery Scheme was established by NHS Lanarkshire in 2003 (Scottish Executive 2006), and the Breastfeed Happily Here Scheme launched in NHS Ayrshire and Arran in 2008 (NHS Ayrshire and Arran 2011). To a greater or lesser extent, the Breastfeeding Welcome Scheme, organised by the National Childcare Trust, has overtaken local NHS board schemes. This latter scheme has increased the number of nurseries passively advertising their supportive stance on breastfeeding (i.e. by placing a 'breastfeeding welcome' sticker on their door or displaying scheme-produced posters on display boards). Unlike the Breastfeeding Friendly Nursery Programme, the Health Promoting Nursery Scheme, the Breastfeed Happily Here Scheme and Breastfeeding Welcome Scheme require no accounting or evidencing of 'good practice' in breastfeeding promotion by participating nurseries, although both provide visual signage and guidance to help indicate to the wider public the supportive stance of the organisation toward breastfeeding.

Previous Research

Despite the importance of early years centres and practitioners to the continuation of B/BMF, there is little research on this topic. The UK Millennium Cohort Study Child Health Group found that the use of formal childcare before the age of 4 months for more than 10h a week was associated with a decreased likelihood of breastfeeding, particularly when mothers worked full time, were more advantaged, and/or were a part of a couple (Pearce et al. 2012). The same study found that use of formal childcare increased the likelihood of breastfeeding for lone mothers (Pearce et al. 2012). A review of research conducted United States found that on-site or nearby-to-work childcare

‘increases breastfeeding success’ (Johnston & Esposito 2007, 17), and Fein, Mandal & Roe (2008) find that being in close proximity to one’s child during work (e.g. having the child at work, using on-site or nearby childcare) is correlated with increased duration of breastfeeding. Cardenas & Major (2005) also strongly advocate the provision of on-site childcare as an effective strategy to help support continued breastfeeding and to reduce absenteeism, and NHS Health Scotland provides a pamphlet directly to mothers that recommends using nearby childcare as one of three strategies to maintain B/BMF upon a return to work (in addition to flexible hours and expressing milk, NHS Health Scotland 2013).

While there is diverse literature on the interface between the workplace and continued breastfeeding, there is far less published on the specific topic of childcare and breastfeeding. In a comparison of Australian and United States settings, Cameron et al. found that childcare settings did not generally actively promote B/BMF, but concluded that encouragement, written policy and staff training on the topic were stronger in Australia (Cameron et al. 2012). Direct and indirect discrimination against breastfeeding mothers by childcare providers has been evidenced in Australian research, where accommodations for B/BMF are highly variable (Smith et al. 2013). Even where childcare providers are supportive of B/BMF, onus is placed on parents to negotiate how to maintain that relationship whilst placing their child in care: ‘With this perception of their role being to support parental choice, breastfeeding encouragement was perceived to be an inappropriate practice for childcare centres’ (Javanparast et al. 2012, 1278).

In New Zealand, the lack of research and initiatives that bridge from childcare providers to breastfeeding mothers has been addressed by Farquhar and Galtry (2003, 2004), and Manhire et al. (2012) have reiterated the need for further education of

childcare providers on this topic. Lucas et al. (2013) have studied attitudes of childcare providers toward breastfeeding in areas with low breastfeeding prevalence in the United States and found that these had varying knowledge regarding the treatment of breast milk, but also believed interventions to promote breast milk feeding should be aimed at mothers rather than childcare providers. Javanparast et al. (2013) have surveyed support strategies for breastfeeding maintenance that are offered by childcare providers in Australia. Findings suggest that simple strategies, like informing mothers that they can provide refrigerated breast milk for their children to consume while at nursery (Javanarast et al. 2013), can be encouragements for mothers to attempt to continue B/BMF after returning to work.

There is also a body of research that pertains to the safe treatment (storage and feeding) of expressed breast milk (e.g. Ogundele 2000; Hamosh et al. 1996), although little information about how this is translated into practice by childcare providers. National guidelines in Scotland for the treatment of breast milk is provided through NHS Scotland (2015).

Methods

Ethics:

Ethical approval for this study was sought and granted by the University of the West of Scotland School of Education prior to any data collection taking place and all participants gave their informed consent to participate voluntarily. Given the potential sensitivity of the topic, the research assistant tasked with conducting focus groups received bespoke training on researching sensitive issues prior to undertaking data collection. Whilst the focus groups conducted in this initial small-scale feasibility study

were semi-structured, the research assistant was coached not to diverge from ethically approved questions, prompts and probes, with the exception of minimal encouragers. Transcripts confirm that this protocol was followed.

Context

For the purposes of this initial small-scale feasibility study, a setting was selected in which it was possible to access both breastfeeding mothers and early years practitioners. This terrain was a local-authority owned nursery in an urban area of Scotland. The nursery is situated in one of the top ten most deprived areas of Scotland (Scottish Government 2016). It provides daytime weekday care for infants and children to the age of 5, as well as housing a local breastfeeding support group on a weekly basis. At the time of study, visual indicators of the nursery's support for breastfeeding were present within the environment (specifically 'Breastfeeding Welcome' sticker displayed, flyers available in parents' room, poster advertising local Breastfeeding Network meeting displayed in parent's room). The site was known to the team prior to data collection, and the research assistant had completed a placement in partial fulfilment of her undergraduate degree in Childhood Studies at the site within the calendar year at the time of data collection; she therefore had a pre-existing relationship with the Early Years practitioners included in the sample, but not with the mother participants (none of whom accessed the nursery setting for their own childcare provision).

Design

The initial small-scale feasibility study followed a qualitative design, using focus groups with a minimum of two participants per group to provide a small insight into the differing and converging experiences and opinions of mothers and early years' practitioners *vis a vis* the continuance of B/BMF when children are in daytime care.

Two focus groups were held, one exclusively with breastfeeding mothers, and one exclusively with early years practitioners.

Theory

The research adopted a Contextual Constructionist (see Andrews 2012) approach using Grounded Theory. This allowed for the existence of an objective reality (i.e. mothers are breastfeeding; mothers are returning to work; children are going to daytime care providers), but also afforded the research team scope to focus on subjective understandings of reality and its perceived influence on behaviour.

Population

To meet inclusion criteria, participants had to be over the age of 18 at the time of study, and offer their consent to participate freely. Breastfeeding mothers were recruited from a community-based breastfeeding support group and were screened to include only those who a) intended to, b) were actively, or c) had previously continued B/BMF following a return to work and placing their child in daytime care. Early years practitioners were recruited from the nursery, which served as the study's setting, and were invited based on their experience either in the management of the nursery and/or specifically for their work with young infants within that nursery. The sample was convenience and relied on volunteerism.

Data Collection

Focus groups were conducted by a Research Assistant within the nursery context and digitally recorded. They were later transcribed by the Research Assistant and anonymised in this process.

Analysis

Given the lack of previous research in this area, and the exploratory design of the study, an inductive coding strategy was used. Coding was conducted independently by two investigators (Dombrowski, Henderson) and through discussion the following emerging themes were identified: strategies for promoting B/BMF; perceptions of friendliness of daytime care provides; legislation; importance of breastfeeding to the selection of daytime care provider; communication with parents; treatment of breast milk. All data was then recoded by one researcher (Dombrowski) using these emerging themes, and presented to the full research team for further analysis.

Results

Recruitment

Within the mothers' focus group, four women were recruited: M1-4. Note that the ages of children were not collected in order to help retain the anonymity of mother participants, given the small sample of participants recruited (this is discussed further in Limitations).

M1 had one child, a baby, and had already returned to work. Her child was only scheduled to begin attending nursery approximately three months from the time of the focus group. M1 provided her baby with breast milk exclusively from a bottle, and desired that this be continued when her child was placed in daytime care.

M2 had two children, both babies, who attended nursery full time. M2 desired that daytime caregivers primarily assist in breast milk feeding, but also considered the possibility of 'pop[ping] into the nursery and breastfeed[ing]'.

M3 had two children, a toddler and baby. She had accessed daytime care for her elder child from 6 months of age, and clarified in discussion her intention to do the same with her new baby. M3, intended to provide expressed milk for her youngest

child if required, but reflected that her elder child had rarely required breast milk feeding while at daytime care; she had been able to structure her work schedule around the demands of breastfeeding by only working during the mornings.

M4 had one child, a baby, who was scheduled to begin nursery full time at 7 months. M4 suspected that her child would only require water while at nursery, since their breastfeeding relationship had already become restricted to morning and evenings. She nonetheless was both prepared and intending to supply frozen milk to her childcare providers if 'need be.'

The focus group with early years practitioners included two participants, EY1 and EY2. EY1 was in a management position within the nursery, and EY2 had extensive experience working with babies within the nursery setting. EY1 had experience breastfeeding her own children, and called upon these experiences during the focus group. Both EY1 and EY2 were experienced practitioners, having been working in the area for approximately 25 and 20 years, respectively. It is important to note that these practitioners had not had any mother providing breast milk in their care within the nursery 'and that's 20 years I have been here' (EY2).

Findings

Responsibility for maintaining a B/BMF relationship was placed on mothers, rather than early years practitioners. From the mothers' perspective, this meant educating staff at their nursery, changing their lifestyles to accommodate the feeding needs of their child, and researching to find the best nursery context for maintaining a breastfeeding relationship: 'But it is em, more just creating an understanding of the staff, understanding the difference between formula and breast milk' (M1); 'I would pick her up at lunch time and then feed her. But that was a choice I made because I was quite concerned about her being away full days while I was breastfeeding' and later 'I chose

to alter everything, like do different work... purely for feeding and my piece of mind' (M3); 'Nothing would stop me either. I have went this far. I would just keep looking for somewhere they could go that ensured I continued [breastfeeding]' (M2).

From the practitioners' point of view, onus was also placed on mothers to seek support for breastfeeding: 'We don't have a policy set out, but... we welcome breastfeeding at the nursery and if a parent did come to us that's something that we would absolutely support' (EY1), and '...if they did want to bring it [breast milk] in it, if they had pumped, then we would deal with that' (EY2). Here, both EY1 and EY2 speak about their willingness to support continued breastfeeding or 'deal' with breast milk feeding, but simultaneously make clear that they do not take a proactive role in this support process. When prompted to explore their personal role in promoting continued B/BMF, practitioners discussed how they altered the environmental context: displaying promotional materials (i.e. posters, flyers, newsletters, EY1 and EY2), not providing play bottles in their children's 'home' play area (EY1), and ensuring that some age-appropriate books that visually depict breastfeeding are available in the book corner (EY1).

M4 explained her belief that this kind of passive support can have negative consequences to mothers investigating childcare options:

Some mums go straight back to work more or less. So they'd be unsure themselves. It would be more reassuring and support mums' confidence if they [practitioners] actually knew and could talk you through different ways to support and things. (M4).

Another mother suggested that written guidance about how to continue B/BMF when returning to work should be given by care providers to prospective parents: 'It would be better if they had something in the welcome pack, because mums just think because they are going to nursery they need to stop. Just having one thing in that welcome pack could make a massive difference' (M2).

Through discussion, one of the practitioners who participated in our focus group began to reflect that the nursery's passive but positive stance toward B/BMF might covertly encourage mothers to wean:

That's something we [the nursery] should look at, when mums... when we meet them and they say 'no I will wean them off.' We need to think more about morning and night feeds, or expressing. To let them know they don't have to stop breastfeeding and they can do it if they want because it is an option, very much so... I guess it's about helping parents know more about it, and that there is different methods to support it. (EY1).

Recollecting her experience when selecting a care provider, M3 explained her perception that '...none of them were really comfortable with, with the feeding of the milk, they only done it because I was so insistent in the feeding the expressed milk' (M3). In addition to the perceived *attitude* of practitioners' to support breast milk feeding, our mothers expressed concern with practitioners' knowledge and competence in this area. M1, M2 and M3 noted that requests by early years' practitioners for the baby's feeding schedule were in conflict with feeding on demand: '...a lot of people who breastfeed, they do on demand feeding, and then understanding that a baby is an 'on demand', because every nursery I went to said 'it's okay, just give us their schedule;'' (M2) and '...they just said 'what time do they feed?' and I was just like 'well, I can give you maybe a rough time, but I can't tell you feed them at this time because they get hungry at different times' (M1). In these anecdotes, practitioners' requests for feeding schedules placed responsibility for facilitating breast milk feeding on mothers, and inadvertently caused these mothers concern. In these examples, it is *knowledge about* B/BMF that is in question.

In addition to practitioners' perceived attitudes and knowledge about B/BMF, mothers raised concerns about the skills and facilities of care providers to treat breast milk appropriately:

I had all this frozen milk, and my son... would take 2 feeds or he would take 7 feeds. So I needed them to store my frozen milk. They didn't have a suitable freezer; they had their freezer for food. ...the knowledge that how to just warm it up, to defrost it, but they didn't [have that]. They had to start, 'how do we?', 'what do we?', 'I don't know if we will be allowed to with health and safety...' (M1)

When M1 stated that she 'didn't find' a nursery in her city that she felt knew how to 'safely store, prepare and provide children with expressed milk' (this was a prompt used by the RA), M2, M3 and M4 agreed that they too had not found a nursery in the wider community with these skills/facilities.

The desire to continue a B/BMF relationship after putting their babies into care, following a return to work, constrained all mothers' choice of care provider. While all four mothers communicated satisfaction with their B/BMF relationship with their child, there was general agreement that the desire to continue this relationship when their child was in daytime care limited their choice of care providers. For example, 'I thought I would have had a greater choice. I never really thought breastfeeding would have limited it so much' (M3).

Discussion

Previous work in the area found that childcare providers do not regularly actively engage prospective parents in a discussion about how to continue B/BMF following a return to work (Javanparast et al 2013), and our data is coherent with these findings. While we did not collect evidence of overt discrimination on the basis of B/BMF (as in Smith et al. 2013), our participating mothers raised concerns about practitioners' attitudes, knowledge about and skills regarding breastfeeding, and questioned the adequacy of facilities to support BMF. The critical importance of facilities to continued B/BMF has been well evidenced in workplace studies (e.g. Tsai 2013; Fein, Mandal & Roe 2008), and there are evidenced benefits to workplaces

communicating positive attitudes and knowledge about B/BMF to mothers when they return to work (cf. Kosmala-Andrews & Wallace 2006).

While there is debate as to whether communicating support and information about continued B/BMF falls within the remit of a childcare provider (Javanparast et al. 2012; Lucas et al. 2013), contemporary Scottish policy recommends this practice (NHS National Services Scotland 2016). Having early years practitioners engage with prospective parents in a discussion about B/BMF would help to ensure and communicate their knowledge about the topic. Indeed, the desire for practitioners to be more proactive in supporting B/BMF was strongly recommended by our participant mothers, and became a point of critical self-reflection for one of our practitioner participants over the course of the focus group.

If child care providers take on a more proactive role in the support of continued B/BMF by engaging prospective parents in discussions about how to access childcare whilst maintaining such a relationship there may be unintended consequences. Lee (2007, 2011) and Kukla (2009) have written about the moralisation of breastfeeding and the way in which pro-breastfeeding campaigns in various nations (including the UK) have facilitated and perpetuated breastfeeding as a ‘measure of motherhood’ (*ibid.*). Public health campaigns aimed to increase early initiation and exclusive breastfeeding to 6 months can have negative consequences for mothers who use formula, whether combination feeding or exclusively (Lee 2007). When ‘breast is best,’ then those using formula are seen as ‘less than’: breastfeeding mothers are perceived to be ‘good’ at mothering (Knaak 2010), and formula feeding mothers as ‘bad’ or ‘worse’ (see also Marshall, Godfrew & Renfrew 2007). For daytime care providers to engage all prospective parent-service-users in a discussion about supporting B/BMF might alienate mothers who formula feed (a majority of mothers in our research context). This is a

high risk; dysfunctional communication pathways can be created and exacerbated where there is a power differential between practitioners and parents. As Brooker has explained:

...the success or failure of such relationships may have their origins in the class and cultural habitus of the participants: not simply in beliefs about childrearing practice, but also in larger assumptions about values, identity, role and status. (Brooker 2010, 185)

With regard to B/BMF, the topic can feel morally charged, and it is well evidenced that socio-economic status has a strong influence on women's feeding behaviours at a population level in the UK.

There is an added equalities dimension to this issue, in that women who are most likely to continue B/BMF in high income nations are themselves more advantaged in terms of income and education level (Victora et al. 2017), and this has also been shown to be true of women returning to work (Bai, Fong & Tarrant 2015; Hills-Bonczyk et al. 1993):

...while there is evidence that the return to paid employment has an impact upon breastfeeding decisions, in reality this tends to reflect socio-economic conditions. In Australia and other Western societies, many women who have completed a high-school or tertiary-level education or hold higher-status occupations possess a degree of control and autonomy over their employment options. (Schmeid & Lupton 2001, 236)

Additionally, expressing breast milk, a precursor to any breast milk feeding that might occur in a daytime care context, seems to be positively associated with maternal employment and higher income (Labiner-Wolfe et al. 2008). Thus, interventions through daytime care settings directed at assisting mothers to continue B/BMF would need to be sensitively delivered. It is conceivable that a one-size-fits-all approach could alienate those whose partnership with early years practitioners (i.e. more deprived) could most benefit children (see Siraj-Blatchford et al. 2010).

Another potentially co-occurring unintended consequence, but one that fits more positively in the health recommendations of the WHO (and Scottish Government's own health targets) could be the normalisation of continued breastfeeding. Faircloth has described mothers who continue a breastfeeding relationship past 12 months as 'inhabit[ing] an uneasy space between ideological norms (which endorse long-term feeding) and statistical norms (which indicate their marginality)' (2010, 363). For childcare providers to create more dialogue about continued B/BMF might help break down taboos around breastfeeding, and specifically breastfeeding whilst working (Gatrell 2007). Whether or not prospective mothers choose to B/BMF or to choose to pursue the continuation of B/BMF when they have returned to work, for the 60.3% of Scottish mothers who return to work within the first year of their child's life (Scottish Parliament 2014), childcare providers have an important role to play in communicating health messages.

Limitations

This study was undertaken as an initial small-scale feasibility study, which firstly sought to determine the feasibility of undertaking research on the interaction between daytime care provision and continued B/BMF. The sample size recruited for the purposes of this feasibility study were sufficient for its purpose, but were not representative. The sample was also convenience and all participants volunteered to participate in the research, thus there is a high likelihood for volunteer bias (Salkind 2010). Given the small sample size, a decision was taken not to seek demographic information that might risk the anonymity of our participants. Thus, the age of mothers, and of their children, as well as mothers' income and education level were not collected in this study. Whilst this decision has an ethical rationale for this initial small-scale

feasibility study, these characteristics are widely evidenced as being important to breastfeeding initiation and continuance, and therefore future research should seek to collect these kinds of data.

Inclusion criteria for our mother participants also meant that we only recruited mothers who were intending to continue to B/BMF upon a return to work, and who were also intending to use daytime care services. This means that we have little information about the reasons why mothers who do not intend to continue a breastfeeding relationship make this decision, or whether a decision to continue this relationship might deter some women from a) returning to work, or b) using daytime care provision. Increasing sample size, but also removing some of the inclusion criteria would allow for a more diverse range of experiences, and richer dataset.

We chose to recruit from one setting for convenience purposes, but given previous literature in the area (e.g. Johnston & Esposito 2007) there would be benefit to creating a design that would allow for comparisons between community-based private, community-based and local authority operated, and work-based (on-site) private childcare provision. There may also be benefit to considering the similarities and differences in the experiences of mothers who place their children with childminders.

A final limitation is that our early years practitioner participants could only speculate on how they might support breastfeeding mothers, as neither had experience in the area. This is likely to do with the setting in which we sampled. Deprivation is associated with lower incidences of breastfeeding in higher income nations (Victora et al. 2016; NHS National Services Scotland 2017), and we spoke to practitioners working in a nursery that is situated within and serving an area of extreme deprivation. Only 25% of babies aged 6-8 weeks were breastfed in Scottish Index of Multiple Deprivation quintile 1 in 2015/16 (*ibid.*), and our setting falls within this category. Again, a larger

sample size and diversity in the settings in which data is collected would be desirable and provide a richer dataset within which to seek themes and trends.

Conclusion

This article reports on a small-scale feasibility study focused on the relationship between breastfeeding mothers' feeding and childcare decisions. Focus groups with B/BMF mothers, as well as with early years practitioners were conducted. In line with previous research, our data highlights concerns with early years practitioners' attitudes, knowledge about, skills and providers' facilities for B/BMF. This may be important to women's feeding decisions and duration of B/BMF, especially when considered against similar evidence taken from workplace-based studies. We recommend that care providers actively engage prospective parents in a discussion about how they can support continued B/BMF, but caution that this support must remain cognisant not to moralise feeding choices.

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